IN THE CLAIMS:

Please amend claims as follows:

1. (CURRENTLY AMENDED) An irrigation control system for land comprising:

(a) at least one meter to measure one or more weather conditions in a first area;

(b) at least one monitor to (i) examine rainfall data derived from a radar scanning at least the first area according to predetermined criteria and (ii) to extract weather data which is representative of the scanned rainfall in a sub-area of the first area;

(c) a ~~store~~ storage device to store the extracted data; and

(d) a controller connected directly or indirectly to the meter and the monitor and to the ~~store~~ storage device to calculate a moisture content value for the sub-area, and to regulate the irrigation in a sub-area.

2. (ORIGINAL) The irrigation control system of claim 1 wherein regulation of irrigation in the sub-area is either by initiating or preventing irrigation of the sub-area depending upon whether the moisture content value is less than or more than the predetermined moisture content value for the sub-area.

3. (PREVIOUSLY AMENDED) The irrigation system of claim 1 wherein there is one monitor.

4. (PREVIOUSLY AMENDED) The irrigation system of claim 1 wherein the weather conditions measured include solar radiation.

5. (PREVIOUSLY AMENDED) The irrigation system of claim 1 wherein the monitor is integrated with the controller.

6. (PREVIOUSLY AMENDED) The irrigation system of claim 1 wherein the controller is a computer.

7. (PREVIOUSLY AMENDED) The irrigation system of claim 1 wherein the irrigation control system further comprises a local switch in the sub-area to initiate or prevent irrigation in response to signals from the controller.

8. (ORIGINAL) The irrigation system of claim 7 wherein the local switch in the sub-area activates or de-activates a local controller for initiating or preventing the irrigation, in response to signals from the controller.

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9. (PREVIOUSLY AMENDED) The irrigation system of claim 7 wherein the irrigation control system further comprises an interruptor to interrupt irrigation in the sub-area.

10. (ORIGINAL) The irrigation system of claim 9 wherein the interruptor interrupts irrigation in the sub-area in response to rainfall in the sub-area.

11. (PREVIOUSLY AMENDED) The irrigation system of [either] claim 9 [or claim 10] wherein the interruption occurs for a period of time determined by the controller.

12. (CURRENTLY AMENDED) A method of irrigating land is provided comprising
the steps of:

    (a) measuring one or more weather conditions in a first area;

    (b) examining rainfall data derived from a radar scanning at least the first area according to predetermined criteria and extracting <u>weather</u> data which is representative of the scanned data in a sub-area of the first area;

    (c) storing the extracted data;

    (d) calculating a moisture content value for the sub-area and a predetermined moisture content value for the sub-area; and

    <u>(e)</u> regulating the irrigation of the sub-area.

13. (ORIGINAL) The method of claim 12 wherein the regulation of the irrigation of the sub-area is either by initiating or preventing irrigation of the sub-area depending upon whether the moisture content value is less than or more than the predetermined moisture content value for the sub-area.

14. (PREVIOUSLY AMENDED) The method of claim 12 wherein the measurement in step (a) is carried out in the same sub-area as that in which the measurement is carried out in step (b).

15. (PREVIOUSLY AMENDED) The method of claim 12 wherein the method comprises a further step of: (f) sensing for rainfall in the sub-area during irrigation and interrupting irrigation in response to rainfall in the sub-area for a period of time controlled by the duration and amount of rainfall.

16. (ADDED PREVIOUSLY) The irrigation system of claim 2 wherein the weather conditions measured include solar radiation.

17. (ADDED PREVIOUSLY) The irrigation system of claim 10 wherein the interruption occurs for a period of time determined by the controller.